FIGURE 1

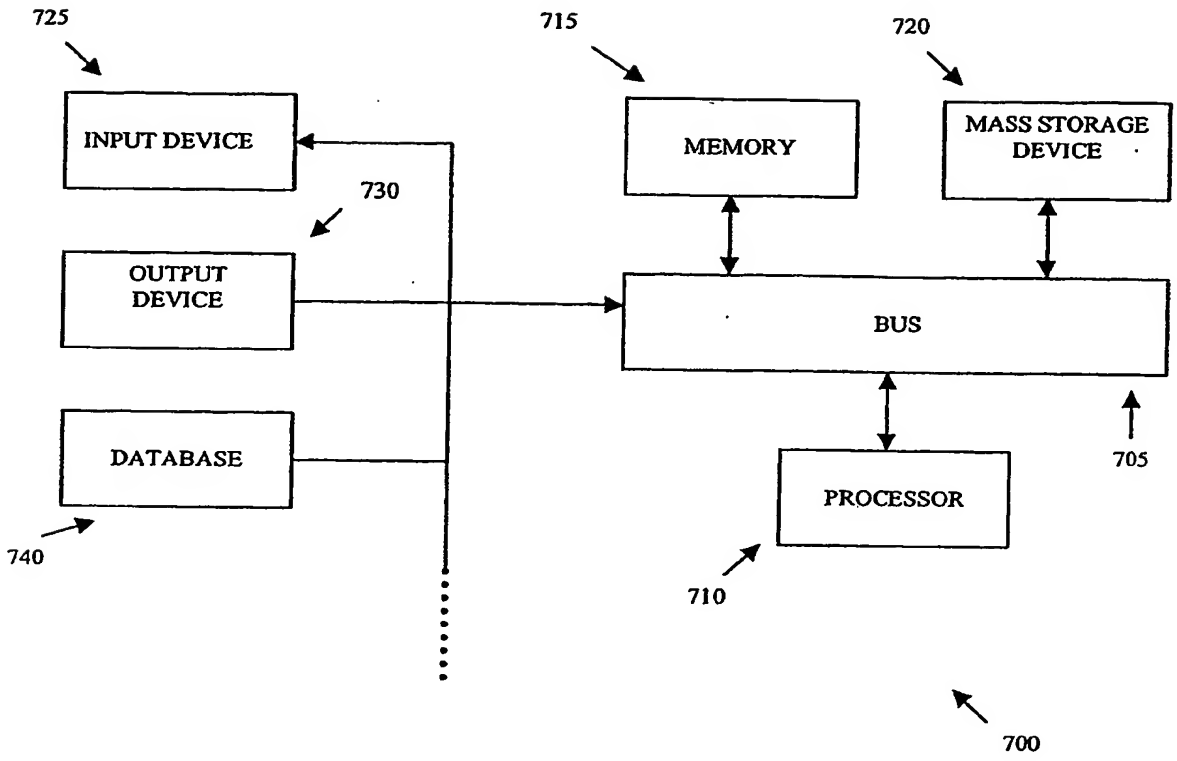
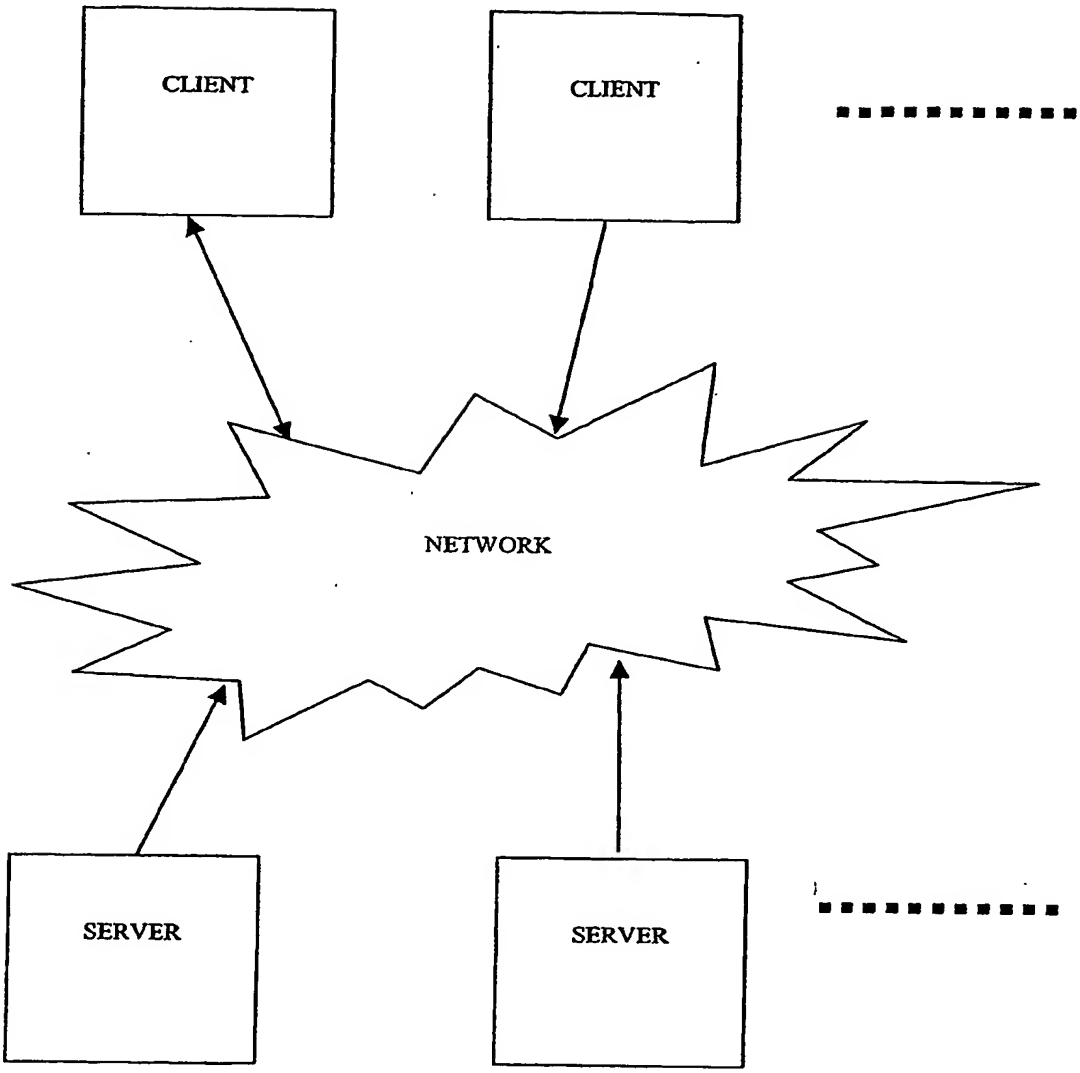

725
715
720
INPUT DEVICE
MEMORY
MASS STORAGE DEVICE
730
OUTPUT DEVICE
BUS
DATABASE
705
PROCESSOR
740
710
700

FIGURE 2



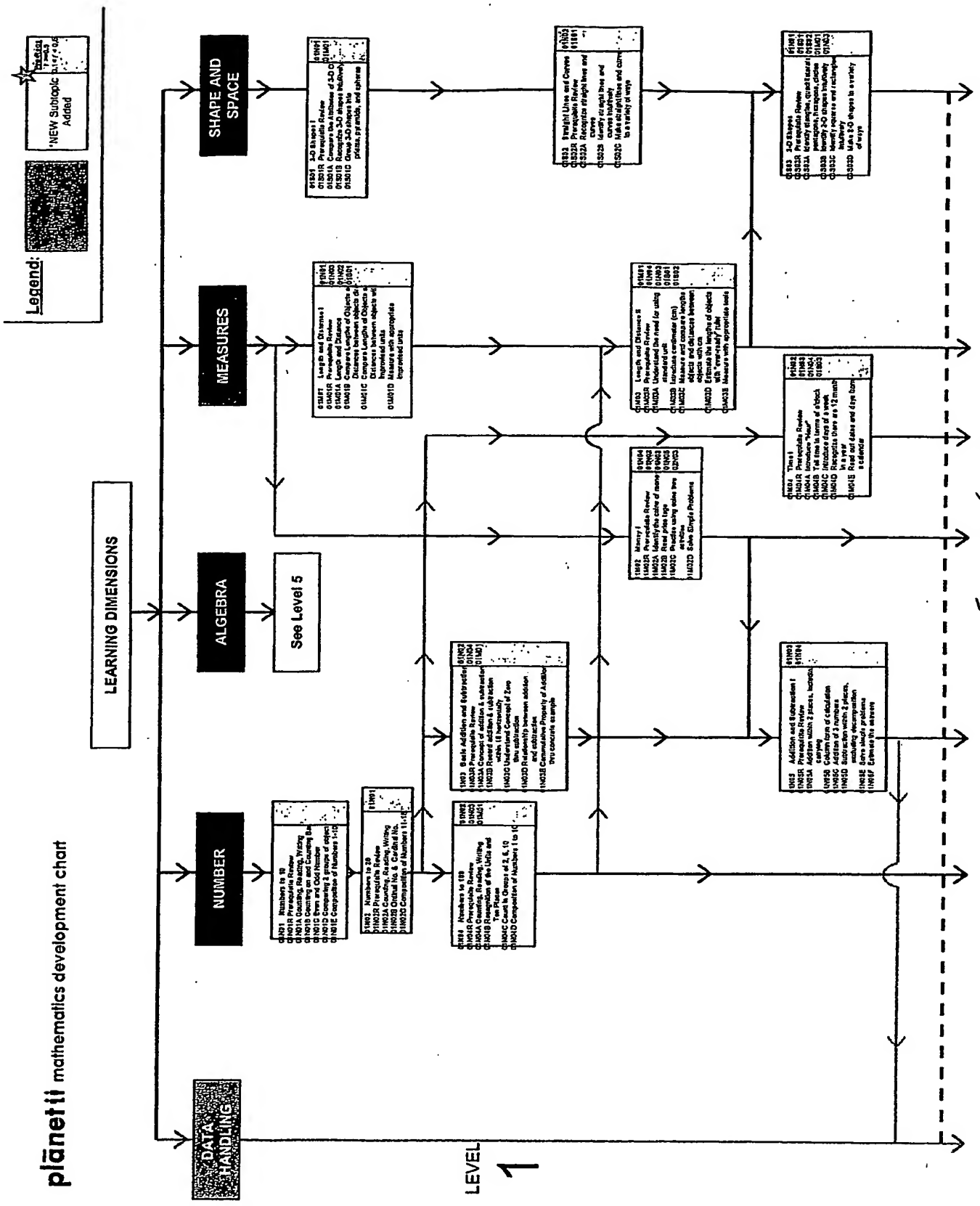

Legend:
NEW Subtopic Added
LEARNING DIMENSIONS
NUMBER
ALGEBRA
See Level 5
MEASURES
SHAPE AND SPACE
DATA HANDLING
LEVEL 1
planetti mathematics development chart

FIGURE 3

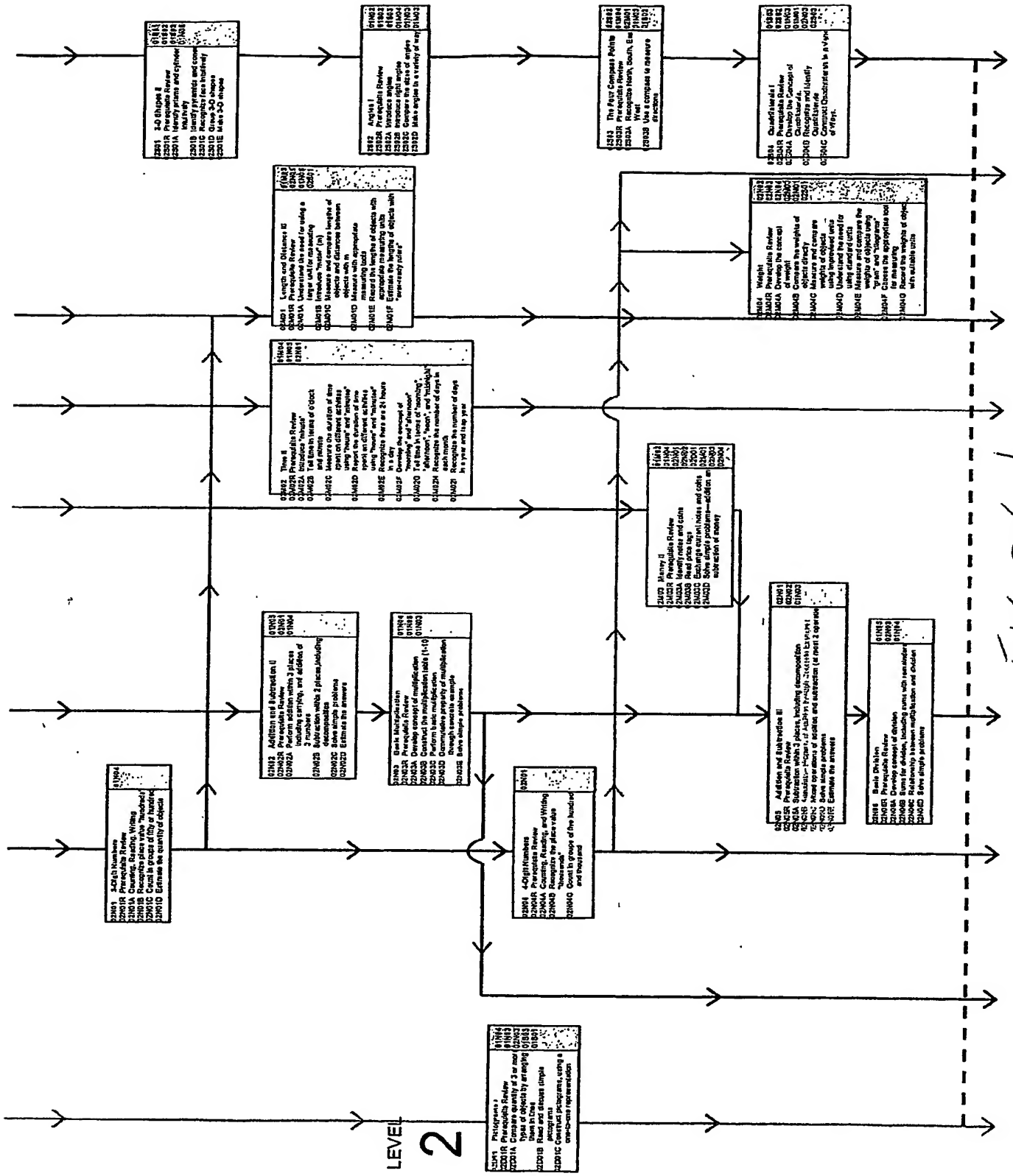


FIGURE 4

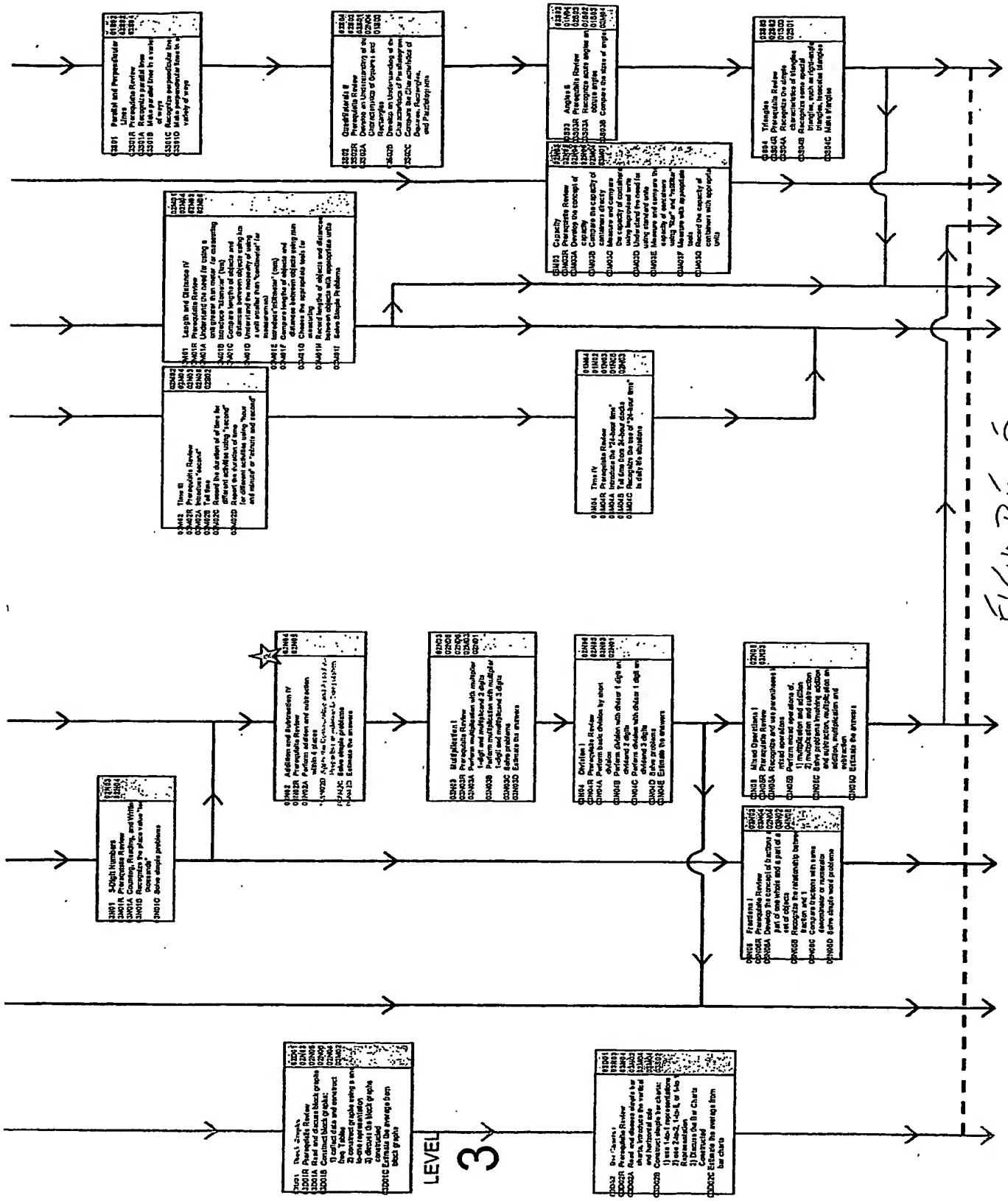


FIGURE 5

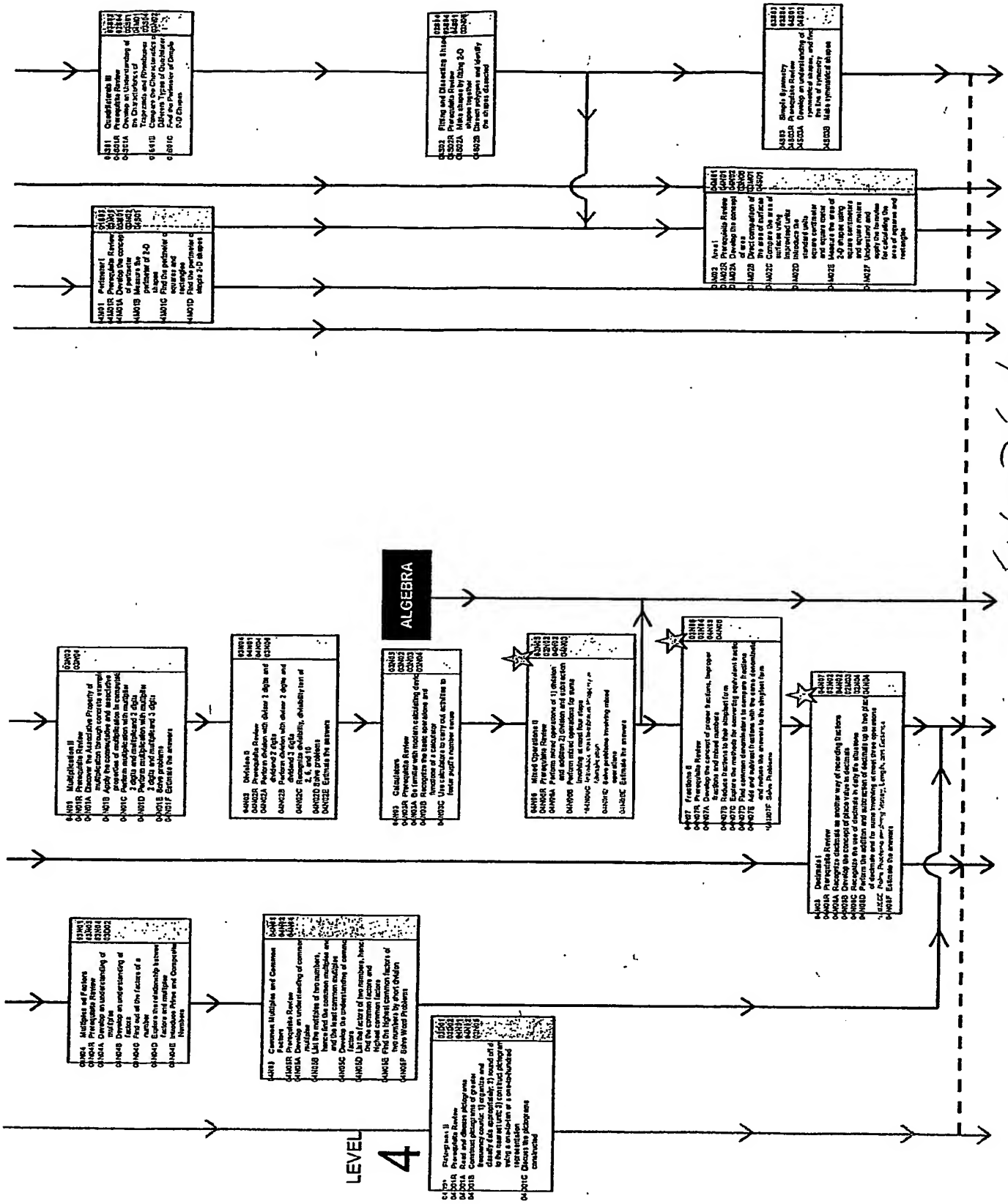


FIGURE 6

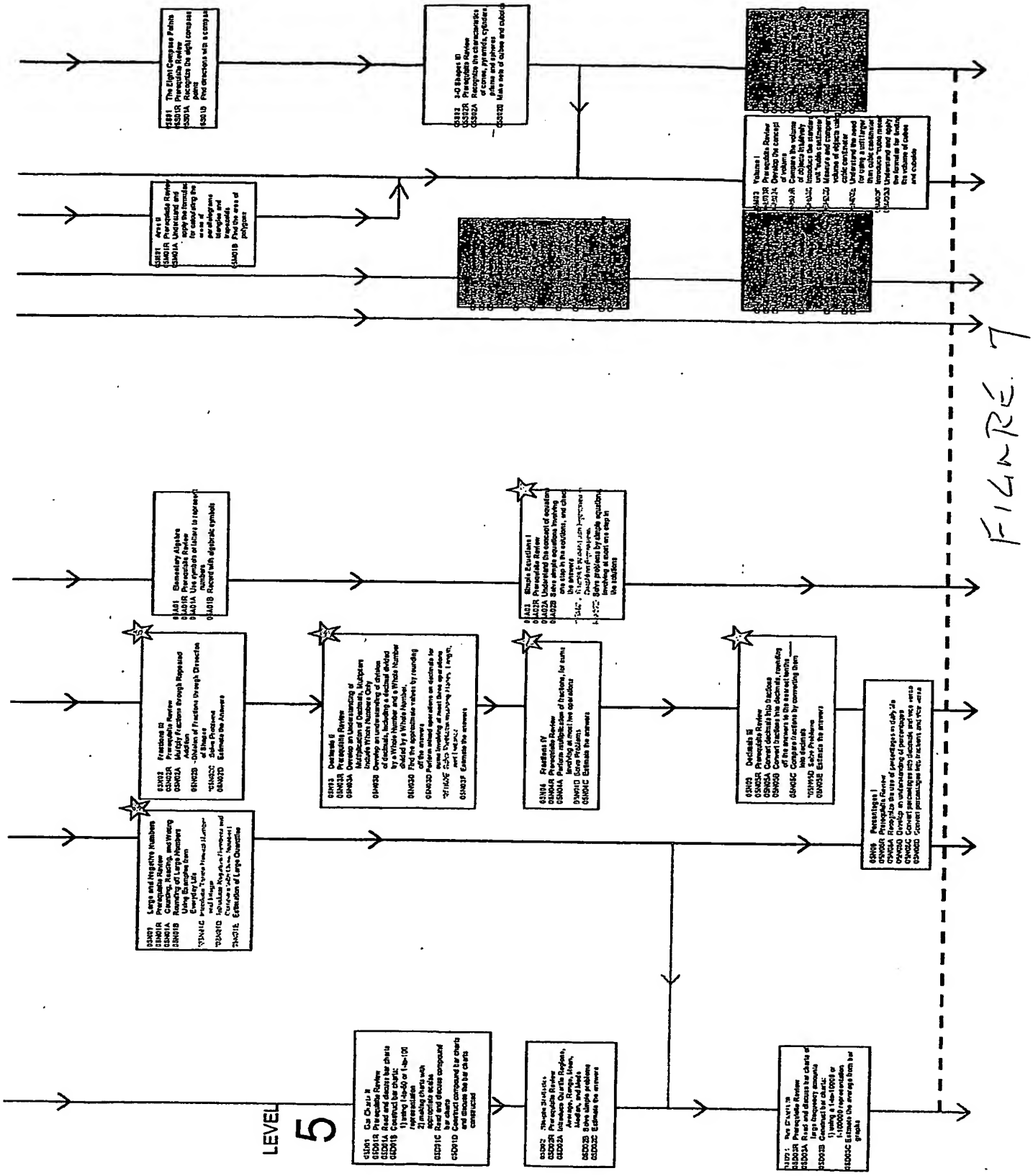


FIGURE 7

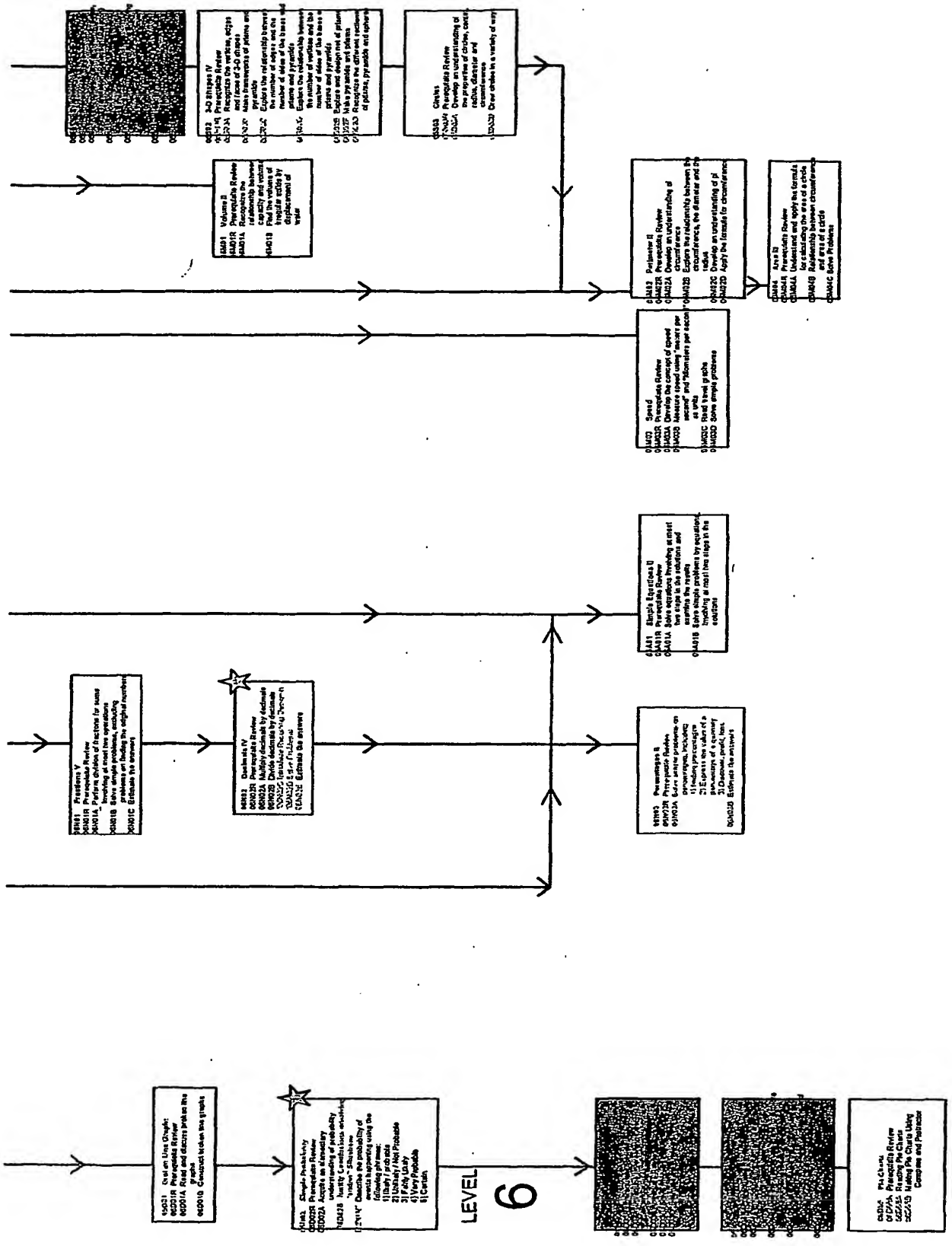


FIGURE 8

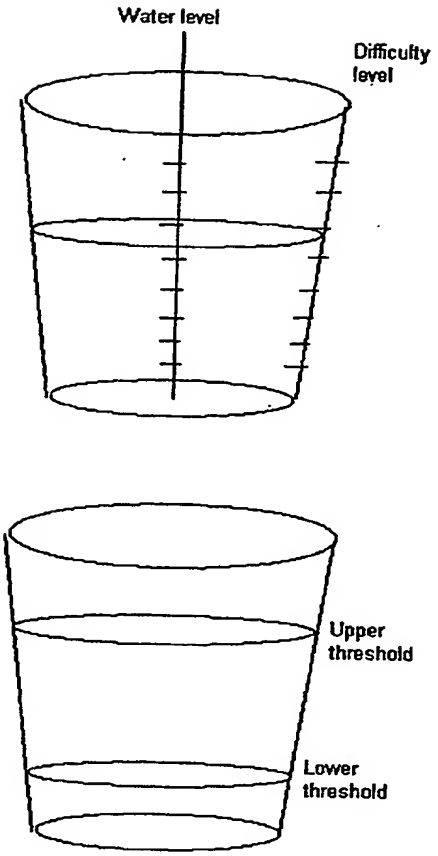
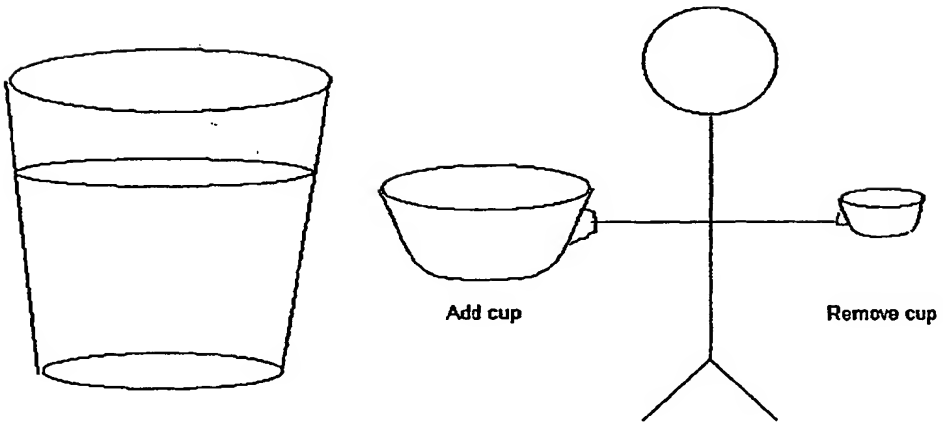


FIGURE 9



Add cup and remove cup are different in sizes depending on the current state of the bucket

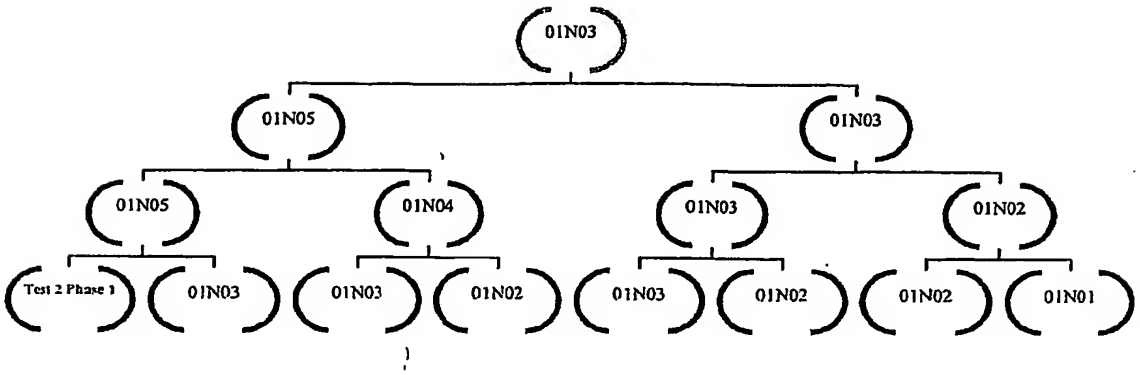

01N03
01N05
01N03
01N05
01N04
01N03
01N02
Test 2 Phase 1
01N03
01N03
01N02
01N03
01N02
01N02
01N01

FIGURE 10

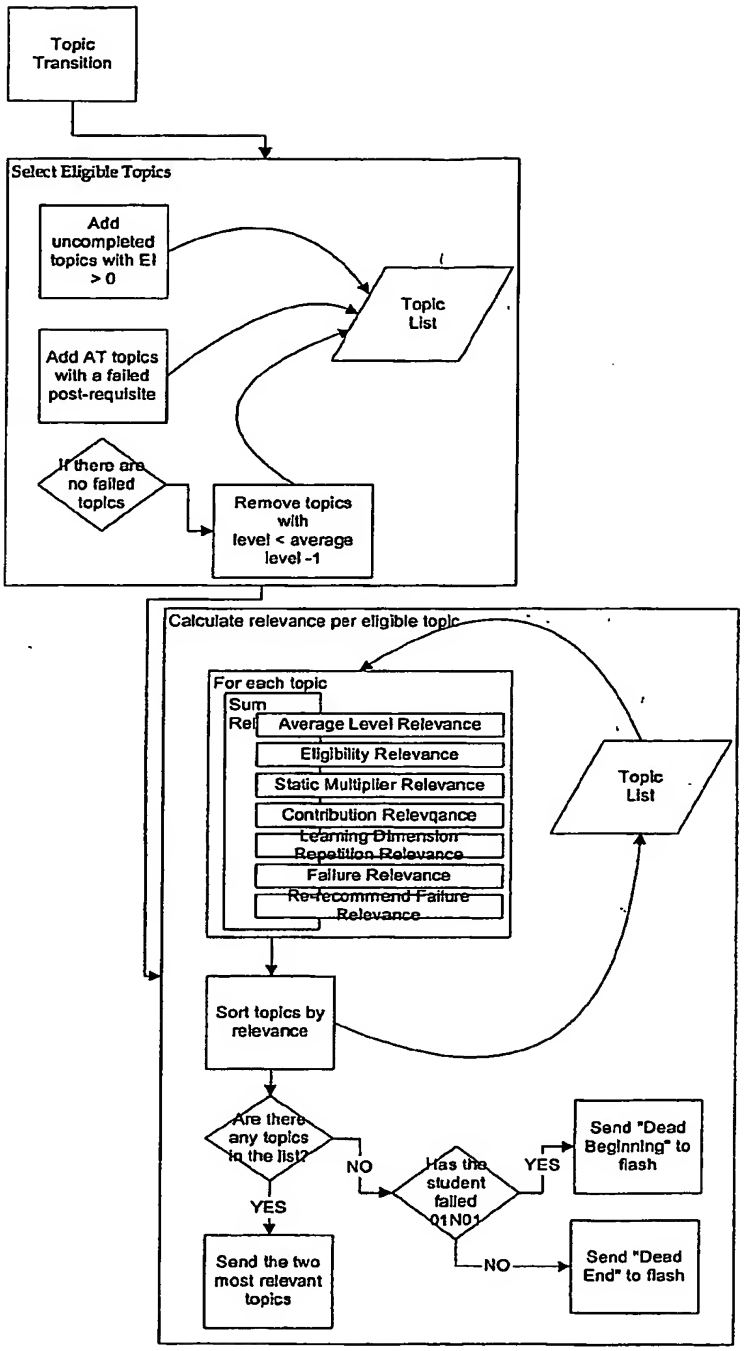
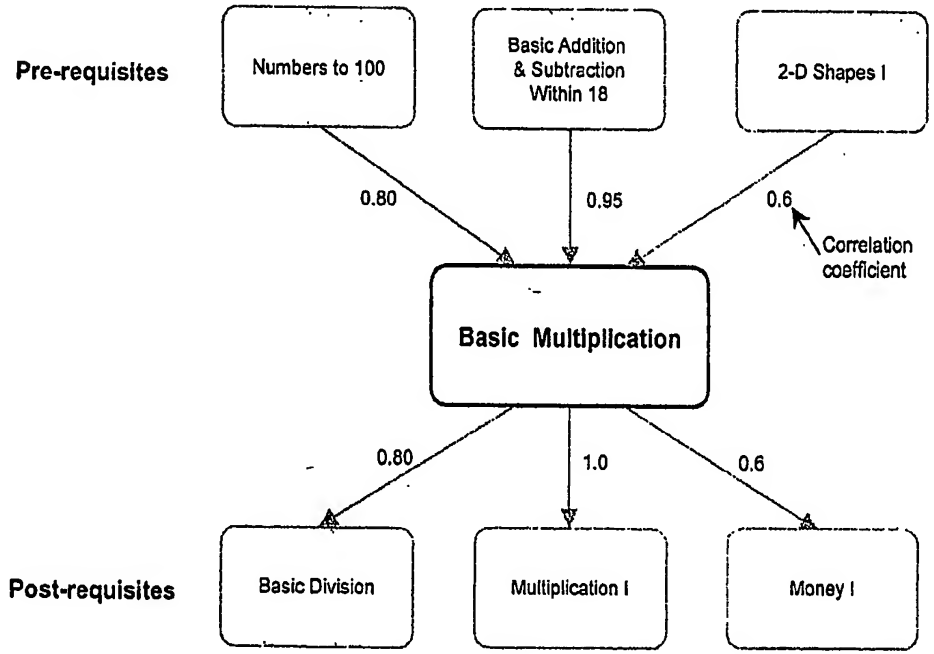
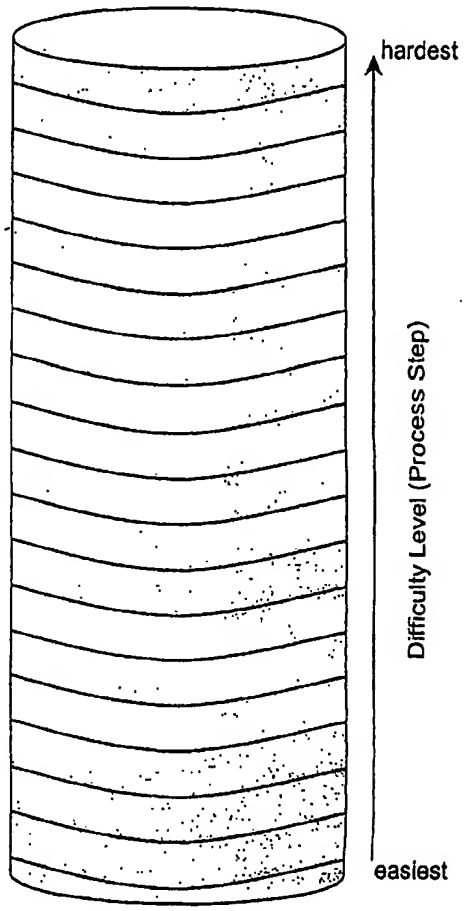

Topic Transition
Select Eligible Topics
Add uncompleted topics with EI > 0
Add AT topics with a failed post-requisite
If there are no failed topics
Topic List
Remove topics with level < average level -1
Calculate relevance per eligible topic
For each topic
Sum
Rel
Average Level Relevance
Eligibility Relevance
Static Multiplier Relevance
Contribution Relevqance
Learning Dimension Repetition Relevance
Failure Relevance
Re-recommend Failure Relevance
Topic List
Sort topics by relevance
Are there any topics in the list?
NO
YES
Has the student failed 01N01
YES
Send "Dead Beginning" to flash
NO
Send "Dead End" to flash
Send the two most relevant topics

FIGURE 11

planetii Networked Math Curriculum





1. Each topic is connected by a group of pre-requisite and post-requisite topics.
2. The ***correlation coefficient*** is a quantitative measure of the level of importance of a pre-requisite topic to its respective topic.
3. Each topic is filled with questions sequenced by a wide range of difficulty levels.

FIGURE 12

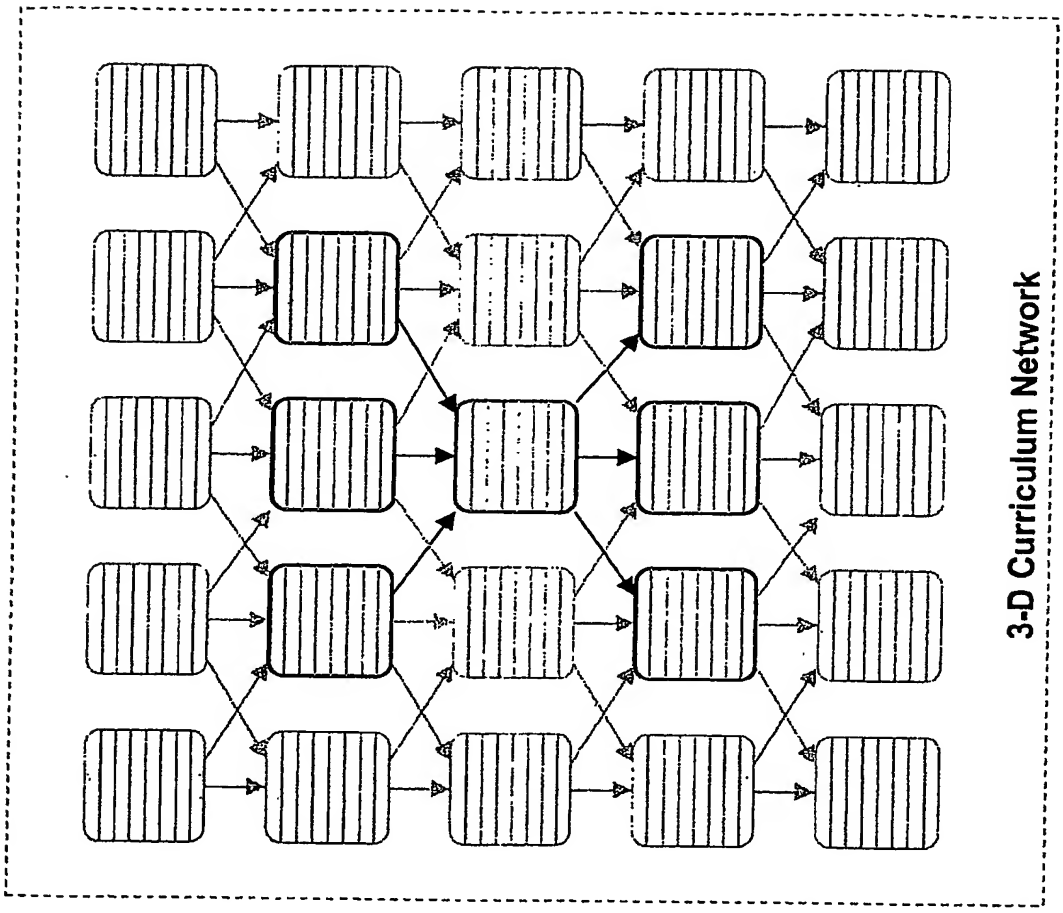


FIGURE 13

planetii

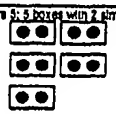
	2			4					6	8	10
Index	PLANETT Subtopic Code	Process Skill	Sample Question Text	5 Multiple Choice Answers a	b	c	d	e	Answer		
70	02N02C	90	354 = ___ tens and 4 ones	5	35	354	30	50	b		
71	02N02C	95	There were 85 people in the park. 37 of them were male. How many of them were female?	52 females	42 females	48 females	58 females	122 females	c		WHAT DO WE KNOW? There are 85 people in the park, males AND females. 37 of them are male. HOW DO WE GET THE ANSWER? The rest (85 - 37) are females. WHAT'S THE ANSWER? There are 48 females.
72	02N02C	95	Mrs. Kim sold 25 eggs this morning. She sold another 50 eggs in the afternoon. She still has 18 eggs left. How many eggs did she have to begin with?	93 eggs	75 eggs	25 eggs	68 eggs	7 eggs	a	See Figure 4: A group of 25 eggs ("Sold") and a group of 50 eggs ("Sold") with a "+" sign between the two groups of eggs. "Mrs. Kim" with 18 eggs.	WHAT DO WE KNOW? Mrs. Kim sold 25 eggs in the morning and 50 in the afternoon. She still has 18 left. HOW DO WE GET THE ANSWER? In total, she sold 75 eggs (25 + 50). Since she still has 18 eggs left, she must have had (75 + 18) eggs to start the day. WHAT'S THE ANSWER? She began the day with 93 eggs.
73	02N02C	95	854 + 354 = ___	1,208	1,108	1,158	500	208	a		
74	02N02C	100	5 twos = ___	5 + 5	2 + 2	2 + 2 + 2 + 2 + 2	55	22	c	See Figure 5: 5 boxes with 2 simple shapes in each box ("5 twos")  5 twos	
75	02N02C	100	4 threes = ___	4	8	12	6	9	c	See Figure 5: 4 boxes with 3 simple shapes in each box ("4 threes") 4 threes	
76	02N02C	100	Grace is 30 years younger than her father. Her brother is 1 year older than Grace. Grace's father is 57 years old. How old is Grace's brother?	88 years old	27 years old	29 years old	26 years old	28 years old	e		WHAT DO WE KNOW? Grace's father is 57 years old. Grace is 30 years younger than her father, and her brother is 1 year older than she. HOW DO WE GET THE ANSWER? Grace is (57 - 30) years old. She is 27 years old. Grace's brother is (27 + 1) years old. WHAT'S THE ANSWER? Grace's brother is 28 years old.

FIGURE 14

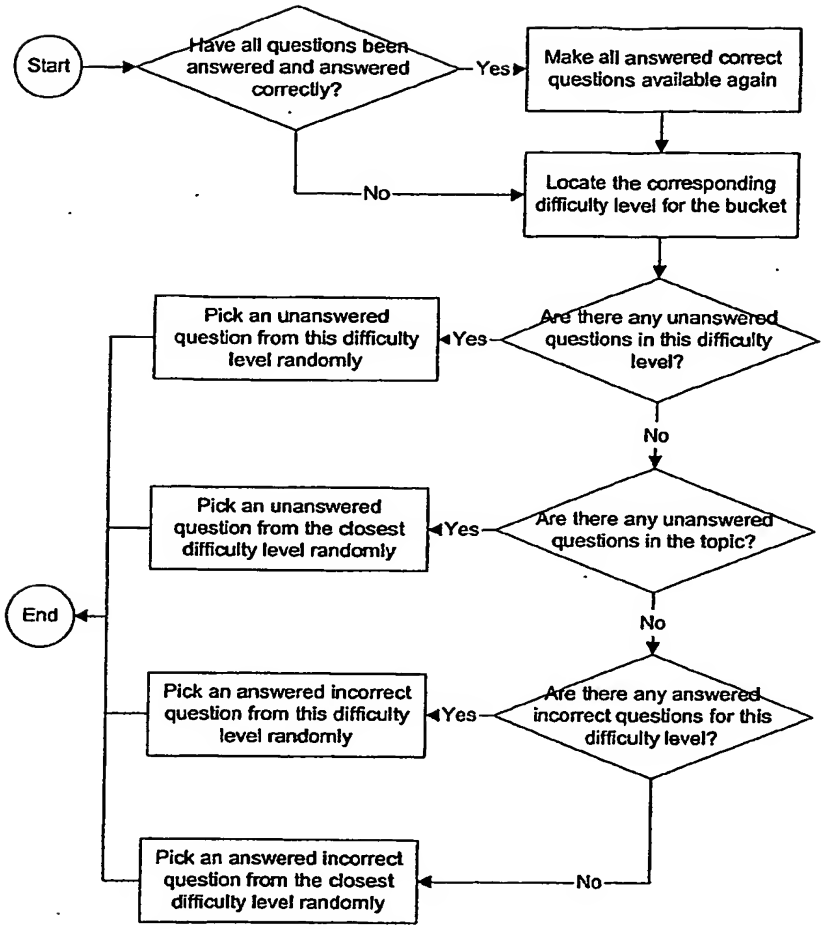

Start
Have all questions been answered and answered correctly?
Yes
Make all answered correct questions available again
No
Locate the corresponding difficulty level for the bucket
Are there any unanswered questions in this difficulty level?
Yes
Pick an unanswered question from this difficulty level randomly
No
Are there any unanswered questions in the topic?
Yes
Pick an unanswered question from the closest difficulty level randomly
No
Are there any answered incorrect questions for this difficulty level?
Yes
Pick an answered incorrect question from this difficulty level randomly
No
Pick an answered incorrect question from the closest difficulty level randomly
End

FIGURE 15